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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/825,212

DATE: 04/18/2001
TIME: 07:04:02

Input Set : A:\00032nc1.app
Output Set: N:\CRF3\04182001\I825212.raw

ENTERED

3 <110> APPLICANT: Benson, Timothy E
 5 <120> TITLE OF INVENTION: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF
 6 STAPHYLOCOCCUS AUREUS THIOREDOXIN REDUCTASE
 8 <130> FILE REFERENCE: 00032.US1
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/825,212
 11 <141> CURRENT FILING DATE: 2001-04-03
 13 <150> PRIOR APPLICATION NUMBER: 60/195,055
 14 <151> PRIOR FILING DATE: 2000-04-06
 16 <160> NUMBER OF SEQ ID NOS: 3
 18 <170> SOFTWARE: PatentIn Ver. 2.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 320
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Staphylococcus aureus
 25 <400> SEQUENCE: 1
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 27 1 5 10 15
 29 Ala Gly Met Thr Ala Ala Val Tyr Ala Ser Arg Ala Asn Leu Lys Thr
 30 20 25 30
 32 Val Met Ile Glu Arg Gly Ile Pro Gly Gly Gln Met Ala Asn Thr Glu
 33 35 40 45
 35 Glu Val Glu Asn Phe Pro Gly Phe Glu Met Ile Thr Gly Pro Asp Leu
 36 50 55 60
 38 Ser Thr Lys Met Phe Glu His Ala Lys Lys Phe Gly Ala Val Tyr Gln
 39 65 70 75 80
 41 Tyr Gly Asp Ile Lys Ser Val Glu Asp Lys Gly Glu Tyr Lys Val Ile
 42 85 90 95
 44 Asn Phe Gly Asn Lys Glu Leu Thr Ala Lys Ala Val Ile Ile Ala Thr
 45 100 105 110
 47 Gly Ala Glu Tyr Lys Ile Gly Val Pro Gly Glu Gln Glu Leu Gly
 48 115 120 125
 50 Gly Arg Gly Val Ser Tyr Cys Ala Val Cys Asp Gly Ala Phe Phe Lys
 51 130 135 140
 53 Asn Lys Arg Leu Phe Val Ile Gly Gly Asp Ser Ala Val Glu Glu
 54 145 150 155 160
 56 Gly Thr Phe Thr Lys Phe Ala Asp Lys Val Thr Ile Val His Arg
 57 165 170 175
 59 Arg Asp Glu Leu Arg Ala Gln Arg Ile Leu Gln Asp Arg Ala Phe Lys
 60 180 185 190
 62 Asn Asp Lys Ile Asp Phe Ile Trp Ser His Thr Thr Lys Ser Ile Asn
 63 195 200 205
 65 Glu Lys Asp Gly Lys Val Gly Ser Val Thr Leu Thr Ser Thr Lys Asp
 66 210 215 220
 68 Gly Ser Glu Glu Thr His Glu Ala Asp Gly Val Phe Ile Tyr Ile Gly
 69 225 230 235 240
 71 Met Lys Pro Leu Thr Ala Pro Phe Lys Asp Leu Gly Ile Thr Asn Asp
 72 245 250 255

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74 Val Gly Tyr Ile Val Thr Lys Asp Asp Met Thr Thr Ser Val Pro Gly
75 260 265 270
77 Ile Phe Ala Ala Gly Asp Val Arg Asp Lys Gly Leu Arg Gln Ile Val
78 275 280 285
80 Thr Ala Thr Gly Asp Gly Ser Ile Ala Ala Gln Ser Ala Ala Glu Tyr
81 290 295 300
83 Ile Glu His Leu Asn Asp Gln Ala Arg Ser His His His His His His
84 305 310 315 320
90 <210> SEQ ID NO: 2
91 <211> LENGTH: 320
92 <212> TYPE: PRT
93 <213> ORGANISM: Escherichia coli
95 <400> SEQUENCE: 2
96 Gly Thr Thr Lys His Ser Lys Leu Leu Ile Leu Gly Ser Gly Pro Ala
97 1 5 10 15
98 Gly Tyr Thr Ala Ala Val Tyr Ala Ala Arg Ala Asn Leu Gln Pro Val
100 20 25 30
102 Leu Ile Thr Gly Met Glu Lys Gly Gly Gln Leu Thr Thr Thr Glu
103 35 40 45
105 Val Glu Asn Trp Pro Gly Asp Pro Asn Asp Leu Thr Gly Pro Leu Leu
106 50 55 60
108 Met Glu Arg Met His Glu His Ala Thr Lys Phe Glu Thr Glu Ile Ile
109 65 70 75 80
111 Phe Asp His Ile Asn Lys Val Asp Leu Gln Asn Arg Pro Phe Arg Leu
112 85 90 95
114 Asn Gly Asp Asn Gly Glu Tyr Thr Cys Asp Ala Leu Ile Ile Ala Thr
115 100 105 110
117 Gly Ala Ser Ala Arg Tyr Leu Gly Leu Pro Ser Glu Glu Ala Phe Lys
118 115 120 125
120 Gly Arg Gly Val Ser Ala Cys Ala Thr Cys Asp Gly Phe Phe Tyr Arg
121 130 135 140
123 Asn Gln Lys Val Ala Val Ile Gly Gly Asn Thr Ala Val Glu Glu
124 145 150 155 160
126 Ala Leu Tyr Leu Ser Asn Ile Ala Ser Glu Val His Leu Ile His Arg
127 165 170 175
129 Arg Asp Gly Phe Arg Ala Glu Lys Ile Leu Ile Lys Arg Leu Met Asp
130 180 185 190
132 Lys Val Glu Asn Gly Asn Ile Ile Leu His Thr Asn Arg Thr Thr Glu
133 195 200 205
135 Glu Val Thr Gly Asp Gln Met Gly Val Thr Gly Val Arg Leu Arg Asp
136 210 215 220
138 Thr Gln Asn Ser Asp Asn Ile Glu Ser Leu Asp Val Ala Gly Leu Phe
139 225 230 235 240
141 Val Ala Ile Gly His Ser Pro Asn Thr Ala Ile Phe Glu Gly Gln Leu
142 245 250 255
144 Glu Leu Glu Asn Gly Tyr Ile Lys Val Gln Ser Gly Ile His Gly Asn
145 260 265 270
147 Ala Thr Gln Thr Ser Ile Pro Gly Val Phe Ala Ala Gly Asp Val Met
148 275 280 285

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150 Asp His Ile Tyr Arg Gln Ala Ile Thr Ser Ala Gly Thr Gly Cys Met
 151 290 295 300
 153 Ala Ala Leu Asp Ala Glu Arg Tyr Leu Asp Gly Leu Ala Asp Ala Lys
 154 305 310 315 320
 160 <210> SEQ ID NO: 3
 161 <211> LENGTH: 333
 162 <212> TYPE: PRT
 163 <213> ORGANISM: Arabidopsis thaliana
 165 <400> SEQUENCE: 3
 166 Met Asn Gly Leu Glu Thr His Asn Thr Arg Leu Cys Ile Val Gly Ser
 167 1 5 10 15
 169 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu
 170 20 25 30
 172 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly
 173 35 40 45
 175 Gly Gln Leu Thr Thr Thr Asp Val Glu Asn Phe Pro Gly Phe Pro
 176 50 55 60
 178 Glu Gly Ile Leu Gly Val Glu Leu Thr Asp Lys Phe Arg Lys Gln Ser
 179 65 70 75 80
 181 Glu Arg Phe Gly Thr Thr Ile Phe Thr Glu Thr Val Thr Lys Val Asp
 182 85 90 95
 184 Phe Ser Ser Lys Pro Phe Lys Leu Phe Thr Asp Ser Lys Ala Ile Leu
 185 100 105 110
 187 Ala Asp Ala Val Ile Leu Ala Ile Gly Ala Val Ala Lys Arg Leu Ser
 188 115 120 125
 190 Phe Val Gly Ser Gly Glu Val Leu Gly Gly Phe Trp Asn Arg Gly Ile
 191 130 135 140
 193 Ser Ala Cys Ala Val Cys Asp Gly Ala Ala Pro Ile Phe Arg Asn Lys
 194 145 150 155 160
 196 Pro Leu Ala Val Ile Gly Gly Asp Ser Ala Met Glu Glu Ala Asn
 197 165 170 175
 199 Phe Leu Thr Lys Tyr Gly Ser Lys Val Tyr Ile Ile His Arg Arg Asp
 200 180 185 190
 202 Ala Phe Arg Ala Ser Lys Ile Met Gln Gln Arg Ala Leu Ser Asn Pro
 203 195 200 205
 205 Lys Ile Asp Val Ile Trp Asn Ser Ser Val Val Glu Ala Tyr Gly Asp
 206 210 215 220
 208 Gly Glu Arg Asp Val Leu Gly Gly Leu Lys Val Lys Asn Val Val Thr
 209 225 230 235 240
 211 Gly Asp Val Ser Asp Leu Lys Val Ser Gly Leu Phe Phe Ala Ile Gly
 212 245 250 255
 214 His Glu Pro Ala Thr Lys Phe Leu Asp Gly Gly Val Glu Leu Asp Ser
 215 260 265 270
 217 Asp Gly Tyr Val Val Thr Lys Pro Gly Thr Thr Gln Thr Ser Val Pro
 218 275 280 285
 220 Gly Val Phe Ala Ala Gly Asp Val Gln Asp Lys Lys Tyr Arg Gln Ala
 221 290 295 300
 223 Ile Thr Ala Ala Gly Thr Gly Cys Met Ala Ala Leu Asp Ala Glu His
 224 305 310 315 320

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226 Tyr Leu Gln Glu Ile Gly Ser Gln Glu Gly Lys Ser Asp
227 325 330

VERIFICATION SUMMARY

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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number